

OHUAB-C
MICROHMMETER

1. GENERAL. This procurement requires a digitally indicating low resistance ohmmeter for measuring resistive loads and resistance in inductive circuits such as transformers and motor windings.

2. CLASSIFICATION. Type II, Class 5, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications except EMI requirements are not invoked.

3. OPERATIONAL REQUIREMENTS. The equipment shall make resistance measurements using the 4-wire Kelvin method over the minimum ranges and accuracies specified below.

3.1 Resistance measurement range. 0 to 20 ohms, typically in five ranges.

3.1.1 Resistance accuracy. $\pm(0.25\%$ of reading + 1 count).

3.1.2 Resolution. 1 microhm at a full scale reading of 2 milliohms, 10 milliohms at a full scale reading of 20 ohms.

3.2 Test current. 2A maximum.

3.3 Display. 3-1/2 digit. The display shall have an overrange indicator.

3.4 Input protection. 1V peak to peak.

4. GENERAL REQUIREMENTS.

4.1 Power source. The equipment shall be powered by one of the following in accordance with MIL-T-28800.

4.1.1 Nominal power source. Maximum power consumption 120W.

4.1.2 DC internal power source. Internal batteries and charger are required. The equipment shall provide at least 1 hour of continuous operation at its maximum test current following a maximum battery charge time of 14 hours.

4.2 Weight. 10 kg (22 lb) maximum.

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.

4.4 Accessories. Kelvin clip leads, capable of gripping 0000 gauge (0.46 in. diameter) wire, or hand spikes with 2.1m (7 ft) cables.